

A proposal on broadening Colombia's National Carbon Tax's scope in the light of the Law of the World Trade Organization¹

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ABSTRACT

Climate change is an essential topic in the contemporary spotlight, and several countries have made efforts to handle it through their international commitments such as the Paris Agreement, which sets an actual baseline that has to be respected to avoid irreparable damage. Carbon taxes came into the picture as plausible tools in the fight against climate change aiming at reducing the production of greenhouse emissions. However, it is necessary to examine such measures under the light of the law of the World Trade Organization to avoid trade concerns or claims by any Member of said organization.

Colombia has issued a carbon tax that charges the sale and importation of certain fossil fuels; yet, we believe that the level of protection could be superior by levying the manufacturing industry.

Thus, the drafters of such measure must tread carefully on the implications that it may have on the competitive position of foreign products that could be under the scope of the tax to avoid a violation of the notions of discrimination or the imposition of unnecessary restrictions protected through the National Treatment principle enshrined in the GATT. On the other hand, the World Trade Organization allows the justification of an inconsistent measure through the general exceptions enshrined in GATT Article XX. This provision will cover these measures provided that they are not applied as a means

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of an unjustifiable or arbitrary discrimination or a disguised restriction on international trade. In this research, it will be ascertained how would extended carbon taxes be compatible with the cited rules.

Keywords: Climate Change; Carbon Taxes; National Treatment; GATT, Paris Agreement; Article XX.

UNA PROPUESTA PARA LA AMPLIACIÓN DEL ESPECTRO DEL IMPUESTO NACIONAL AL CARBONO COLOMBIANO A LA LUZ DEL ORDENAMIENTO JURÍDICO DE LA ORGANIZACIÓN MUNDIAL DEL COMERCIO

RESUMEN

El cambio climático es, posiblemente, el tema principal en la luz pública, y varios países han empleado esfuerzos para mantenerlo a raya por medio de sus compromisos con entes supranacionales, como el Acuerdo de París, que fija una meta clara en aras de evitar un perjuicio irreparable. Los impuestos al carbono han aparecido como una posible ruta para ayudar en esta lucha; no obstante, puede generar problemas con la normativa de la Organización Mundial del Comercio. Colombia se ha unido a esta iniciativa e introdujo dicha medida a la importación y venta de combustibles fósiles, pero creemos que al gravar la industria manufacturera aumentará el alcance de su protección. De igual forma, reconocemos que por este medio podría socavar la norma de Trato Nacional dentro del mencionado sistema legal, el GATT, específicamente.

Así, se debe ser cauteloso al confeccionar tal norma previendo las implicaciones que habría de generar a la posición competitiva de los productos extranjeros dentro del alcance de la norma, tema de gran complejidad al ser impredecible. En este sentido, esta organización permite una justificación por conducto del artículo XX del GATT, la cláusula general de excepciones, recurso altamente útil para una medida como la propuesta.

Palabras clave: Cambio climático; Impuestos al carbón; Trato nacional; GATT; Acuerdo de París.

INTRODUCTION

Environmental concerns are present in our everyday reality, shifting between several shapes throughout the different stages of modern society. Nowadays, each person is able to inquire about climate change, endangered species, air pollution and every other upsetting phenomenon, increasing worldwide awareness about the entity of these situations.

Similarly, this problem has reached to higher instances, such as international organizations as the United Nations, setting the path for international cooperation against preventable environmental disasters. For instance, there have been several agreements on how to tackle them, obliging governments to put them on the move.

Nonetheless, States pursuing such ends cannot be oblivious to other commitments acquired with other international organizations. Thus, the World Trade Organization

obliges its members to liberalize trade and to avoid the imposition of discriminatory measures, meaning that perhaps some measures against climate change, for example, could be found to be distorting trade.

Carbon taxes are part of the range of measures against climate change and have demonstrated to be an important tool in facing it. Thereupon, several countries decided to enact them and some studies claim that the effects that they will bring are positive. Among these countries, we can find Colombia and its National Carbon Tax, levying fossil fuels.

Generally speaking, fossil fuels are not the only product that harms the environment that could be subject to a carbon tax, it could be extended to other polluting goods, thereby enhancing environmental protection through it; yet, this process has to be made cautiously to avoid any sort of conflict inside the World Trade Organization.

Hence, this dissertation attempts to bring some light on what circumstances must be taken into account by lawmakers to broaden the coverage of a carbon tax and thus elude any dispute under the World Trade Organization. Also, if the measure were to be eventually contested, which arguments could favour Colombia's measure? Consequently, the relevant question of this dissertation is how should Colombia enact a carbon tax that levies a great variety of goods while being consistent with the law of the World Trade Organization?

CHAPTER I: THE ROLE OF STATES REGARDING CLIMATE CHANGE

1. PRELIMINARY NOTES

The Intergovernmental Panel on Climate Change (hereinafter "IPCC") defines climate change as "any change in climate over time due to natural variability or as a result of human activity."³ The alteration which is subject of this study is the one caused by human activity since most of the scientific community has found that the main trigger for it are the greenhouse gases (hereinafter "GHG") that human activity releases every day.⁴

Climate change is not a discovery from the twenty-first century, not even from the twentieth century. The first signs of its detection date back to the eighteenth century, when several renowned authors (such as David Hume and Montesquieu) analyzed how the European climate had moderated throughout the centuries, adjudicating it to the gradual clearing of the forests and by cultivation's development.⁵ Furthermore, in the nineteenth century, during the Second Industrial Revolution, Swedish chemist Svante

3 Pielke, Roger. "What Is Climate Change?" *Issues in Science and Technology* 15, no. 3 (2004). 516.

4 Ocko, Ilissa. "9 ways we know humans triggered climate change." Environmental Defense Fund, 2017. <https://www.edf.org/climate/9-ways-we-know-humans-triggered-climate-change>

5 Fleming, James. *Historical perspectives on climate change*. New York and Oxford: Oxford University Press, 1998. 12-18.

Arrhenius found that increasing carbon dioxide's concentration in the atmosphere leads to the raising of its temperature.⁶

Thus, climate change is not a topic of a contemporary fashion but one that has been present for a long time and that has gained the awareness to the point that States are intervening to avoid the harmful effects that it entails, an issue that constitutes the core of the present text.

2. FIRST ANTECEDENTS OF A JOINT CONCERN

Even though international law has existed since the dawn of human civilization,⁷ it did not take climate change in consideration until a few decades ago, a matter which will be elucidated in the next section, precisely because it was not an imminent threat as it is today.

Nevertheless, one of the first signs of a joint scientific concern about this problematic dates from 1968, when the Stanford Research Institute brought a report to the American Petroleum Institute. It showed how gaseous atmospheric pollutants could lead to increases in temperature, melting of ice caps and sea level rise, which made some of the producers aware of the magnitude of the issue.⁸

Subsequently, the concerns above made climate change a matter of international discussion. Thus, the First World Climate Conference took place in 1979, followed by another meeting in Villach, Austria in 1985. Notwithstanding that these approaches were not as successful as intended, it reached United Nations' General Assembly, where it was a topic of debate, which led to other meetings such as the ones in Toronto in 1988 and the Hague in 1989,⁹ demonstrating how representatives from the world were taking part of this dialogue.

Hence, while the regulation of climate change was not even being discussed, interest towards it was growing stronger and reached to the scope of a supranational entity, the United Nations (hereinafter "UN").

3. CLIMATE CHANGE BECOMES AN ACTUAL POLITICAL ISSUE: THE UNITED NATIONS INTERVENE

Although the UN had a particular institution that dealt with the environment, which still exists to this day, the UN Environment Programme founded in 1972 at the Stockholm

6 Heal, Geoffrey. "Climate Change—"the Greatest External Effect in Human History". In *Endangered Economies: How the Neglect of Nature Threatens Our Prosperity*, 32. New York: Columbia University Press, 2017.

7 Korff, S.A. "An Introduction to the History of International Law." *The American Journal of International Law* 18, no. 2 (1924). 246.

8 Wiles, Richard. "It's 50 years since climate change was first seen. Now time is running out." *The Guardian*, March 15, 2018, online at: <https://www.theguardian.com/commentisfree/2018/mar/15/50-years-climate-change-denial>

9 Bodansky, Daniel. "The history of the global climate change regime." In *International relations and global climate change*, edited by Urs Luterbacher and Detlef F. Sprinz, 23-41. London: The MIT Press, 2001. 24.

Conference, its functions were not linked directly to the protection against climate change, but to secure that industries would not harm the environment with their activities.¹⁰

Accordingly, in the context of UN Environment Programme, the IPCC was established in 1988, with the goal that scientists from all over the world would lay out their findings regarding climate change and its effects as well as response strategies.¹¹

In this respect, the UN were showing their will to intercede with climate change and was making its organs to work against it, getting aid from scientists that had the most information about this so-called "new" phenomenon. Consequently, the IPCC issued its first report in 1990 that displayed the possible outcomes of climate change,¹² which assisted greatly as it encouraged countries to come to terms with these findings within this organization's framework.

So, a Second World Climate Conference took place also in 1990, in Geneva, Switzerland, with the participation of several countries¹³. The dialogue was based on planning the future actions that were mandatory to deal with the issue at hand and ultimately the call for a framework convention on climate change, with the upcoming UN Conference on Environment and Development in Rio de Janeiro¹⁴ as a deadline for its signing.

Furthermore, the UN General Assembly developed this determination issuing Resolution 42/212 of 1990, establishing an Intergovernmental Negotiating Committee on climate change open to all State Members.¹⁵ Nonetheless, as a substantial part of the world's economy was based on fossil fuels (and it still is), detractors to this initiative stepped forward, turning a matter of itself troublesome, more complex.¹⁶ However, countries reached to a consensus in 1992 that created the United Nations Framework Convention on Climate Change (hereinafter "UNFCCC"), that has "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system"¹⁷ as its primary objective.

- 10 United Nations Environmental Programme. "Background." <http://www.unepfi.org/about/background/>
- 11 Union of Concerned Scientists. "The IPCC: Who Are They and Why Do Their Climate Reports Matter?" Last revised date: October 11, 2018. <https://www.ucsusa.org/global-warming/science-and-impacts/science/ipcc-backgrounder.html#.W6wufC13GqA>
- 12 Melillo, J.M, et al. *Climate Change. The IPCC Scientific Assessment*. New York: Cambridge University Press, 1990. Accessed December 20, 2018. https://www.researchgate.net/profile/Michael_Ryan5/publication/235650900_Effects_on_Ecosystems/links/02e7e51996a7389a8b000000/Effects-on-Ecosystems.pdf
- 13 Carpenter, Chad, Chasek, Pamela, Wise, Steve and Cherian, Anilla. "A Brief History of the Framework Convention on Climate Change." *Earth Negotiations Bulletin* 12, no. 12, (1995). 1.
- 14 Ferguson, Howard. "Second World Climate Conference, held in the International Conference Centre, Place de Varembé, Geneva, Switzerland, from 29 October to 7 November 1990." *Environmental Conservation* 18, no. 1, (1991). 81.
- 15 General Assembly resolution, *Protection of global climate for future and present generations of mankind*, A/RES/45/212 (21 December 1990).
- 16 Sebenius, James. "Designing Negotiations toward a New Regime: The Case of Global Warming." *International Security* 15, no. 4, (1991). 127-130.
- 17 *United Nations Framework Convention on Climate Change*, 1155 U.N.T.S 107, (May 9th, 1992), article 2. Online at: <https://unfccc.int/resource/docs/convkp/conveng.pdf>

Likewise, it comprises a set of commitments that countries need to follow, general ones, such as promote scientific research and plans regarding climate change and more specific ones, requiring developed countries to take the lead in the current process and to aid developing countries in it, both economic and institutionally.¹⁸

Moreover, the Conference of the Parties is in charge of developing the Convention's implementation as well as every decision that it finds to be necessary to further its goals. The Conference is composed by members from states as well as from non-governmental organizations, granting a more accurate view of the situation and how should the institution proceed and as a field where other agreements could be signed¹⁹ (i.e., the Kyoto Protocol).

4. THE WORLD TRADE ORGANIZATION COMES INTO THE PICTURE

While the General Agreement on Tariffs and Trade (hereinafter "GATT") was signed in 1947, it was only binding for 23 countries and dealt only with difficulties of that time, i.e. reducing tariffs.²⁰ Hence, the implications of GHG caused by economic activity were clearly out of the scope of this institution. The only shallow concern about the environment was located in its Article XX (b) and (g), determining that an inconsistent measure could be justified if it was "necessary to protect human, animal or plant life or health" or "relating to the conservation of natural exhaustible resources(...)".²¹

Subsequently and due to the Stockholm Conference, the UN asked the GATT Secretariat to intervene, and it decided to do so by drafting a study titled "Industrial Pollution Control and International Trade" in 1971, which focused mainly on how measures regarding the protection of the environment could constitute a new form of protectionism.²² On the same year, a Group on Environmental Measures and International Trade was established and was open to all GATT parties, but it was not activated until twenty years later before the mentioned UN Conference on Environment and Development in Rio de Janeiro.²³

Regarding new obstacles to trade, during the Tokyo Rounds, participants analyzed when should environmental issues be part of a technical barrier to trade. There, Contracting Parties agreed upon the Standards Code in 1979, which pursued the elimination of

18 Parikh, Jyoti and Baruah, Litul. "A New Framework for the UNFCCC: Common but Differentiated Responsibilities among Non-Annex I Countries." *Economic and Political Weekly* 47, no. 45 (2012). 69.

19 *Supra* 17, article 7.

20 Crowley, Meredith. "An Introduction to the WTO and GATT." *Economic Perspectives* 27, no. 4, (2003). 42-57.. 43.

21 *General Agreement on Tariffs and Trade*, 61 Stat. pt. 5 T.I.A.S 1700 55 U.N.T.S 194, (October 30th, 1947), article XX paragraphs (b) and (g).

22 GATT, *Industrial Pollution Control and International Trade*, Note by the Secretariat. June 9, 1971, L/3538.

23 Gentile, Dominic. "International Trade and the Environment: What is the Role of the WTO?" *Fordham Environmental Law Review* 19, no, 1 (2009). 196.

environment-related measures and stated that environmental concerns were permitted, along with the protection of human, animal or plant life and health, similar to the GATT provision. It is important to note that the current Agreement on Technical Barriers to Trade was largely inspired from the Standards Code.²⁴

Nonetheless, there was a case in the GATT era that had to ponder environmental concerns with trade, the renowned US – Tuna, where Mexico challenged a measure from the United States as it was affecting its exports of tuna to the latter country. Also, the United States justified this limitation because of the method that was employed when catching the fish, as it could harm dolphins and other marine mammals. Ultimately, the case was brought to the GATT panel, that decided, in 1991, that the measure was inconsistent with GATT Article XI, making it a quantitative restriction and that was not justified under article XX, not reaching the standard needed in order to be so, demonstrating how international trade law could struggle when environmental issues were at stake.²⁵

The situation remained still until the last phase of the Uruguay Rounds. Then, countries agreed on the creation of the World Trade Organization (hereinafter "WTO" through the Marrakesh Agreement. It acknowledged environmental challenges as its preamble shows that one of the objectives of the organization is "(...) expanding the production of and trade in goods and services while allowing for the optimal use of the world's resources in accordance with the objective of sustainable development (...)".²⁶

Moreover, as a result of the stated rounds, a Committee on Trade and Environment (hereinafter "CTE") was also established inside the WTO, through the Ministerial Decision of April 14th, 1994, addressing matters such as the relationship between the multilateral trading system and environmental measures, taxes and multilateral environmental agreements, among others.²⁷ This grants a significant step towards harmony between two branches of international law since the CTE cooperates with other international organizations and thus notifies the WTO of its findings, setting the ground to address trade and environment together.²⁸

In conclusion, even inside a trade-focused organization such as the WTO the awareness of the harm that economic activity could bring to the environment is palpable and opens the door for a multitude of scenarios in which one or the other must prevail, such as the core of the present study.

- 24 Sawhney, Aparna. "WTO-Related Matters in Trade and Environment: Relationship between WTO Rules and MEAs." *Indian Council for Research on International Economic Relations*, (2004). 10 – 11.
- 25 Housman, Robert and Zaelke, Durwood. "The Collision of the Environment and Trade: The GATT Tuna/Dolphin Decision." *The Environmental Law Reporter* 22, no. 4 (1992). 76 -78.
- 26 *Marrakesh Agreement*, 1867 U.N.T.S 154, I.L.M 1144, (April 15th, 1994), preamble, first paragraph.
- 27 Multilateral Trade Negotiations (The Uruguay Round), Trade Negotiations Committee, Meeting at Ministerial Level, Palais des Congrès, Marrakesh (Morroco). 12-15 April 1994, Annex II (Trade and Environment, Decision of April 14, 1994). MTN.TNC/45 (MIN).
- 28 Schultz, Jennifer. "The GATT/WTO Committee on Trade and Environment – Toward Environmental Reform." *The American Journal of International Law* 89, no. 2 (1995). 423-439. 439.

CHAPTER II: COLOMBIA

Colombia could not be oblivious to the mentioned process and decided to aid the fight against climate change and, along a significant share of the international community, displayed its interest in establishing active participation in the bodies that encourage the protection of the environment, not only on the international picture but also internally, as will be further developed.

Consequently, it was part of the Paris Agreement, where States representing 97% of global GHG emissions²⁹ agreed upon the first treaty that established a specific goal regarding climate change, signed in 2015, namely:

"Holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change,"³⁰

In contrast, even though signatories to the treaty are bound to the cited guideline, there is not a measurable standard which they could be compared to. Therefore, each country needs to comply with its responsibilities through an aggregate of measures called Intended Nationally Determined Contributions (hereinafter "INDCs") which implies a unilateral determination of the goals that the country plans to fulfill, taking its national circumstances rather than collective ones in consideration.³¹

Furthermore, its ultimate goal is to reduce its emissions by 20% by 2030, according to the business-as-usual (BAU) standard and if supported internationally, this objective could rise to 30%.³² Moreover, Colombian efforts are being concentrated on problematic sectors such as agriculture, forestry, and energy since they constitute a significant fraction of its GHG emissions.³³

Thus, several programs have been put into function aiming at overcome emissions even before signing the Paris Agreement, i.e. the Colombian Low Carbon Development

29 Stavins, R and Ki-moon, Ban. "The United States and the Paris Agreement: A Pivotal Moment." *Harvard Project on Climate Agreements*, (2017). 2.

30 *Paris Agreement*, U.N.T.S 54113, (December 12th, 2015), article 2.

31 Levin, K *et al.* "DESIGNING AND PREPARING INTENDED NATIONALLY DETERMINED CONTRIBUTIONS (INDCs)." *World Resources Institute*, 13. <https://www.wri.org/sites/default/files/designing-preparing-indcs-report.pdf>

32 Rich, David; Northrop, Eliza and Mogelgaard, Kathleen. "Colombia First South American Country to Release New Climate Plan Ahead of Paris." *World Resources Institute*. September 14, 2015. <https://www.wri.org/blog/2015/09/colombia-first-south-american-country-release-new-climate-plan-ahead-paris>

33 Correa, Pablo. "En 20 años Colombia aumentó en un 15% sus emisiones de Gases Efecto Invernadero." *El Espectador*. November 3, 2016. Accessed December 20, 2018. <https://www.elespectador.com/noticias/medio-ambiente/20-anos-colombia-aumento-un-15-sus-emisiones-de-gases-d-articulo-663749>.

Strategy, initiated by the Ministry of Environment and Sustainable Development in 2011,³⁴ which also helps greatly in complying with the mentioned treaty.

This strategy is to be accomplished through Nationally Appropriate Mitigation Actions (NAMAs) which are specific programs that developing countries implement embedded on their INDCs, following the principle of common but differentiated responsibilities.³⁵

Initially, the Colombian government seeks to develop 8 Sectoral Mitigation Plans (PAS in Spanish) on electricity, mines, industries, transportation, agriculture, hydrocarbons, waste management, and housing.³⁶ Through these agendas NAMAs will be implemented; currently, there are seventeen scheduled NAMAs in Colombia such as non-motorized transportation, forestry conservation, cattle farming, and renewable energy sources, among others.³⁷

Also, Colombia issued the Law 1931 addressing climate change on July 27, 2018. Several elements could be highlighted from it, such a complete set of instruments (national and regional) that try to control this problem as well as an information system to monitor climate change. However, the National Tradable Emissions Quotas Program gains the spotlight, as it represents a significant step towards mitigation since it creates a model in which quotas representing GHG are awarded, thereby allowing its owner to pollute the indicated amount³⁸, which ultimately sets a Colombian Emissions Trading Scheme.

Taking these institutions in consideration it is clear that Colombia is attempting to comply with its obligations under the UNFCCC and according to the Ministry of Environment, it has "reduced its GHG emissions by 23% without international cooperation"; therefore, the Colombian government claims to be fulfilling and even surpassing the goals enshrined in their INDCs.³⁹

Finally, it is important to allude the fact that Colombia is a member of both the UN and WTO since their creation. Regarding the former organization, it has this status since November 5th, 1945^[40] and referring to the latter, it has the status of a founding member as it took part of the Uruguay Rounds, immediate antecedent to the establishment of

34 Ministerio de Ambiente y Desarrollo Sostenible. *Estrategia Colombiana de Desarrollo Bajo en Carbono*. http://www.minambiente.gov.co/images/cambioclimatico/pdf/Estrategia_Colombiana_de_Development_Bajo_en_Carbono/FOLLETO_DE_PRESENTACION_ECDBC.pdf

35 Boos, Daniela, et al. *How are INDCs and NAMAs linked?* Eschborn: Deutsche Gesellschaft für Internationale Zusammenarbeit, 2014. Accessed December 21, 2018. https://www.giz.de/en/downloads_els/indcnama.pdf

36 *Supra* 34.

37 Ministerio del Medio Ambiente y Desarrollo Sostenible. *Listado de NAMAs en Curso*. http://www.minambiente.gov.co/images/cambioclimatico/pdf/Accion_nacional_Ambiental_/PORTAFOLIO_NAMAS_DCC_publicar_ultima_version.pdf

38 Ley 1931 de 2018, "Por medio de la cual se establecen directrices para la gestión del cambio climático", 27 de julio de 2018, Colombia.

39 "Así será la ley de Cambio Climático." *Revista Semana*, November 8, 2017. Accessed December 22, 2018. <https://www.semana.com/nacion/articulo/asi-sera-la-ley-de-cambio-climatico/536001>

40 United Nations Organization, "Member States" Accessed December 23, 2018. <http://www.un.org/en/member-states/#gotoC>

the WTO.⁴¹ Likewise, Colombia ratified the UN Charter through Law 13 of 1945 and the Marrakesh Agreement with Law 170 of 1994. Correspondingly, the Paris Agreement was ratified with the Law 1844 of 2017.

CHAPTER III: CARBON TAXES AND ITS REGULATION IN COLOMBIA

A carbon tax was enacted in 2016 by Colombia for environmental purposes, setting the starting point for the regulation of such measures in the country.

In Colombia, taxes are imposed by law. Colombia's Political Constitution establishes that in times of peace, it is faculty of the Congress, the departmental assemblies and the municipal councils to impose contributions to the people, whose elements have to be limited within the Law.⁴² Consequently, in certain abnormal times, the President can ask the Congress permission to attend the situation that is disturbing public order with a signed petition along with the signatures of its Ministers and then this corporation will allow the President to create taxes or modify the existent for the time that the petition is due.⁴³

1. COLOMBIA'S NATIONAL CARBON TAX

Consequently, addressing the regulation of Colombia's National Carbon Tax (hereinafter "CNCT"), it is part of the Law 1819 of 2016, but hereinafter will be referred to as "the Statute" and the rules containing the measure are articles 221 to 223 of the Statute which also specify the elements of the tax. Also, it was issued during regular times, meaning it followed the normal process enshrined in Constitution's article 338.

This is the text of the stated articles containing the elements of the measure:

Article 221.⁴⁴ Carbon tax. The carbon tax is a burden that lies upon the carbon content of every fossil fuel, including oil derivatives and every kind of fossil gas that is used with energetic purposes, as long as they are used for combustion.

41 World Trade Organization, "Colombia and the WTO," Accessed December 23, 2018. https://www.wto.org/english/thewto_e/countries_e/colombia_e.htm

42 Colombia's Political Constitution, article 338.

43 Ibid, article 215.

44 "Artículo 221. Impuesto al carbono. El Impuesto al carbono es un gravamen que recae sobre el contenido de carbono de todos los combustibles fósiles, incluyendo todos los derivados de petróleo y todos los tipos de gas fósil que sean usados con fines energéticos, siempre que sean usados para combustión.

"El hecho generador del impuesto al carbono es la venta dentro del territorio nacional, retiro, importación para el consumo propio o importación para la venta de combustibles fósiles y se causa en una sola etapa respecto del hecho generador que ocurra primero. Tratándose de gas y de derivados de petróleo, el impuesto se causa en las ventas efectuadas por los productores, en la fecha de emisión de la factura; en los retiros para consumo de los productores, en la fecha del retiro; en las importaciones, en la fecha en que se nacionalice el gas o el derivado de petróleo.

"El sujeto pasivo del impuesto será quien adquiera los combustibles fósiles, del productor o el importador; el productor cuando realice retiros para consumo propio; y el importador cuando realice retiros para consumo propio.

The taxable event of the carbon tax is the sale inside the national territory, withdrawal, importation for self-consumption or importation for the sale of fossil fuels and is caused in a single stage relating to the taxable event that takes place first. Regarding gas and oil derivatives, the tax is caused in the sales made by producers, the date of invoice issuing; regarding withdrawals for producer consumption, the date of the withdrawal, regarding importations, the date that the gas or oil derivative is nationalized.

Whoever acquires fossil fuels from producers or importers, the producer when making withdrawals for self-consumption, and the importer when making withdrawals for self-consumption is to be regarded as the passive subject of the tax.

Producers as well as importers, regardless of their quality of passive subjects are responsible for the tax, when the taxable event takes place.

Article 222.⁴⁵ Tax base and rate. The carbon tax shall have a specific rate considering the carbon dioxide emission (CO₂) factor out of every determined fuel, expressed in volume units (kilograms of CO₂), per energetic unit (Terajoules) according to fuel's volume or weight. The rate corresponds to fifteen thousand pesos (\$15.000) per CO₂ ton and the rate values per fuel unit shall be the following:

Fossil fuel	Unit	Rate/unit
Natural gas	Cubic meter	\$29
Liquified petroleum gas	Gallon	\$95
Gasoline	Gallon	\$135
Kerosene and jet fuel	Gallon	\$148
ACPM	Gallon	\$152
Fuel oil	Gallon	\$177

(...)

Paragraph 1. The rate per CO₂ ton will be adjusted every February first with the inflation of the previous year plus a point until it is equivalent to one Tributary Value Unit (TVU) per CO₂ ton. As a consequence, the values per unit of fuel will increase in the aforementioned manner.

(...)

"Son responsables del impuesto, tratándose de derivados de petróleo, los productores y los importadores, independientemente de su calidad de sujeto pasivo, cuando se realice el hecho generador".

45 "Artículo 222. Base gravable y tarifa. El Impuesto al Carbono tendrá una tarifa específica considerando el factor de emisión de dióxido de carbono (CO₂) para cada combustible determinado, expresado en unidad de volumen (kilogramo de CO₂) por unidad energética (Terajoules) de acuerdo con el volumen o peso del combustible. La tarifa corresponderá a quince mil pesos (\$15.000) por tonelada de CO₂ y los valores de la tarifa por unidad de combustible serán los siguientes:

"Parágrafo 1°. La tarifa por tonelada de CO₂ se ajustará cada primero de febrero con la inflación del año anterior más un punto hasta que sea equivalente a una (1) UVT por tonelada de CO₂. En consecuencia los valores por unidad de combustible crecerán a la misma tasa anteriormente expuesta.

"Parágrafo 4°. La tarifa del impuesto por unidad de combustible en Guainía, Vaupés y Amazonas de que trata este artículo, para la gasolina y el ACPM será cero pesos (\$0).

"Parágrafo 5°. Los combustibles a los que se refiere este artículo no causarán el impuesto cuando sean exportados".

Paragraph 4. Tax rate per fuel unit in Guaimía, Vaupés and Amazonas for gasoline and ACPM shall be zero pesos (\$0).

Paragraph 5. The fuels that this article refers to will not cause the tax when exported.

Article 223.⁴⁶ Specific destination of the national carbon tax. The raising of the national carbon tax will be destined to the Environmental Sustainability and Sustainable Rural Development in Areas Affected by the Conflict Fund ("Fund for a Sustainable Colombia") enshrined in article 116 of the Law 1769 of 2015. These resources will be budgeted by the Ministry of Finance and Public Credit.

The revenue will be destined, among others, to the management of coastal erosion, to the conservation of hydric sources and the protection of ecosystems according to the guidelines that the Ministry of Environment and Sustainable Development set forth.

After scrutinizing these provisions, it is possible to conclude that it is not a measure that seeks protectionism for Colombian fossil fuel market, since it is applied equally to every operation dealing with the fuels that it considers, finding it difficult for producers or importers to escape from the taxable event.

2. OUR PROPOSAL

Furthermore, the main focus of this thesis is to propose an extended carbon tax to other products. Our proposal involves charging products by the amount of GHGs that they release, utilizing an impartial quantifier of the charge, but also avoiding the protection the national industry as it will apply to imported products and local ones equally. Thereupon, our proposal would have to maintain the particularities of CNCT of being imposed at the border for imported products and with an equal rate to foreign and national goods.

Also, drafters would have to take into account which industries could be affected by the tax, since the optimal aim has to be ones that have high contamination as well as high trade exposure, thus aiming what some experts call energy-intensive trade-exposed (EITE) products to grant an easy administration of the charge.⁴⁷

Consequently, when scrutinizing Colombia's imports, we were able to ascertain that aside from the products of the current CNCT, roughly 35% of them are distributed between chemical products, metals, textiles, plastics, rubbers and paper goods.⁴⁸ These

46 "Artículo 223. Destinación específica del impuesto nacional al carbono. El recaudo del impuesto nacional al carbono se destinará al Fondo para la Sostenibilidad Ambiental y Desarrollo Rural Sostenible en Zonas Afectadas por el conflicto ("Fondo para una Colombia Sostenible") de que trata el artículo 116 de la Ley 1769 de 2015. Estos recursos se presupuestarán en la sección del Ministerio de Hacienda y Crédito Público. "Los recursos se destinarán, entre otros, al manejo de la erosión costera, a la conservación de fuentes hídricas y a la protección de ecosistemas de acuerdo con los lineamientos que para tal fin establezca el Ministerio de Ambiente y Desarrollo Sostenible".

47 Kortum, Sam and Weisbach, David. "Border Adjustments for Carbon Emissions: Basic Concepts and Design." *Resources for the Future*, (2016). 19.

48 The Observatory of Economic Complexity, "Colombia," Accessed December 28, 2018. <https://atlas.media.mit.edu/en/profile/country/col/>

categories are adequate examples of products that could be eligible for a carbon tax since they come from the manufacturing sector, which is a growing sector in Colombia,⁴⁹ meaning that it has noteworthy trade exposure and the mentioned activity is responsible for 11% of local GHG emissions.⁵⁰

Moreover, this information aids the thesis of which products should be tackled with the proposed measure. Acknowledging the fact that 62% of Colombia's GHG emissions come from forestry and agricultural activities⁵¹ and that the energy sector is presently being imposed with CNCT, the precise step forward would have to be the manufacturing industry.

Thus, this industry "comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products".⁵² Consequently, it encompasses a vast amount of activities, such as textiles, leather products, chemicals and activities dealing with mining, as they fit within the cited definition.

Additionally, it is our duty to clarify that this industry does not only produce carbon dioxide emissions, the only gas that is currently being tackled with CNCT. Other polluting gases such as methane or nitrous oxide⁵³ harm the environment and it has been demonstrated that the manufacturing industry emanates them through the process of transforming goods and from their wastes.⁵⁴ Hence, our proposal seeks to enhance the protection of the environment by levying emissions of these gases as well.

CHAPTER IV: THE WORLD TRADE ORGANIZATION AND CARBON TAXES

Given the aforementioned context regarding the enactment of the measure at issue and the reasons behind it and after setting an outline for our proposal it is time to compare it with the regulations inside the WTO that may be raised against them and which Colombia is bound to due to its quality of member of this organization, as well as the arguments that may aid it in a dispute.

49 Asociación Nacional de Empresarios de Colombia, "Colombia: Balance 2018 y Perspectivas 2019," Accessed December 28, 2018. 27. <https://imgcdn.larepublica.co/cms/2018/12/28132344/ANDI-Balance-y-Perspectivas.pdf?w=auto>

50 Instituto Nacional de Hidrología, Meteorología y Estudios Ambientales. *Inventario Nacional y Departamental de Gases de Efecto Invernadero – Colombia*. Bogotá D.C.: Puntoaparte, 2016. <http://documentacion.ideam.gov.co/openbiblio/bvirtual/023634/INGEI.pdf>

51 Ibid.

52 Levinson, Marc. "What Is Manufacturing? Why Does The Definition Matter?" *Congressional Research Service*, (2017). 2.

53 United States Environmental Protection Agency. "Overview of Green House Gases" Accessed January 10, 2019. <https://www.epa.gov/ghgemissions/overview-greenhouse-gases>

54 *Supra* 50.

1. LEGAL STANDARD

GATT Article I.1

It is mandatory to start the analysis of WTO's provisions from the Most Favored Nation principle, which basically states that members should grant an equal tariff and regulatory treatment to all members when importing or exporting "like products", thus yielding the same benefit given to a member to every other, embodied in GATT Article I:1.⁵⁵

GATT Article II

Moreover, GATT Article II deals with Schedules of Concessions, which are legal documents that bear witness of the results of tariff negotiations of WTO members, where limitations upon the extent of market access barriers are represented and are known as bound rates.⁵⁶ More specifically, Article II:1 (b) states that:

(b) The products described in Part I of the Schedule relating to any contracting party, which are the products of territories of other contracting parties, shall, on their importation into the territory to which the Schedule relates, and subject to the terms, conditions or qualifications set forth in that Schedule, be exempt from ordinary customs duties in excess of those set forth and provided therein. Such products shall also be exempt from all other duties or charges of any kind imposed on or in connection with the importation in excess of those imposed on the date of this Agreement or those directly and mandatorily required to be imposed thereafter by legislation in force in the importing territory on that date.

The type of measures that would fall under the scope of article II are the ones that are supposed to condition the entering of the product to national territory, i.e. tariffs,⁵⁷ meaning that internal charges that are applied at points of customs will be out of its scope. Similarly, the measure must "accrue at the moment of the importation and by virtue of the importation"⁵⁸ to be deemed as an import duty.

GATT Article II:2 (a)

Nevertheless, there is an exemption to this rule on the very same article that states:

55 Matsuhita, Mitsuo. "Basic Principles of the WTO and the Role of Competition Policy." *Washington University Global Studies Law Review* 3, no. 2, (2004). 367.

56 Van den Bossche, Peter. *The law and policy of the World Trade Organization: text, cases and materials*. New York: Cambridge University Press, 2005. 399.

57 *Cambridge Dictionary*, s.v. "tariff", accessed January 10, 2019, <https://dictionary.cambridge.org/es/diccionario/ingles/tariff>

58 Panel Report, *Colombia - Textiles*, para. 7.139; Panel Report, *China - Auto Parts*, para. 158

2. Nothing in this Article shall prevent any contracting party from imposing at any time on the importation of any product:

(a) a charge equivalent to an internal tax imposed consistently with the provisions of paragraph 2 of Article III* in respect of the like domestic product or in respect of an article from which the imported product has been manufactured or produced in whole or in part;

Firstly, the steps that a measure needs to comply with to be under the quoted rule's scope are two: that it is consistent with Article III:2 and that it levies a product or an item that the product utilized in its production.

Addressing the first step, some elements determine if a measure is within article III:2's reach: "(i) constitute taxes or other charges of any kind, (ii) constitute internal measures and (iii) apply, directly or indirectly, to imported and domestic products".⁵⁹

Regarding the second step, certain Panels have analyzed the fact that elements that are not present in the final product but that were part of their production process be the basis of the charge itself. Firstly, we must allude to the GATT-era *US – Superfund*, back in 1987, where the United States levied a charge on products based on the chemicals that they utilized during their manufacturing and to balance the environmental damage that they entailed.⁶⁰ Thus, the Panel ruled that the charge was in fact allowed under Article II:2 (a) since it was a charge on products, following the guidelines established by the Party on Border Tax Adjustments.⁶¹

*"As these conclusions of the CONTRACTING PARTIES clearly indicate, the tax adjustment rules of the General Agreement distinguish between taxes on products and taxes not directly levied on products they do not distinguish between taxes with different policy purposes. Whether a sales tax is levied on a product for general revenue purposes or to encourage the rational use of environmental resources, is therefore not relevant for the determination of the eligibility of a tax for border tax adjustment. For these reasons the Panel concluded that the tax on certain chemicals, being a tax directly imposed on products, was eligible for border tax adjustment independent of the purpose it served. The Panel therefore did not examine whether the tax on chemicals served environmental purposes and, if so, whether a border tax adjustment would be consistent with these purposes."*⁶²

Likewise, in *Argentina – Bovine Hides and Leather*, the Panel found that, even though a tax has the goal of anticipating the payment of a tax on income (this is, a direct tax and thereby not eligible to be adjusted at the border), as it is imposed on products, falls within Article III:2.⁶³

59 Panel Report, *Argentina – Hides and Leather*, para. 11.139.

60 Sifonios, David. *Environmental Process and Production Methods (PPMs) in WTO law*. Lausanne: Springer, 2018. 88.

61 GATT (1970) Report of the Working Party on Border Tax Adjustments, adopted on 2 December. (L/3464), para. 14.

62 GATT Panel Report, *US — Superfund*, para. 5.2.4.

63 Panel Report, *Argentina – Hides and Leather*, para. 11.160.

Finally, there is a provision which establishes that internal measures imposed at the importation of imported products is deemed to be an internal tax and thus part of article III, Ad article III's introductory clause:

Any internal tax or other internal charges, or any law, regulation or requirement of the kind referred to in paragraph 1 which applies to an imported product and to the like domestic product and is collected or enforced in the case of the imported product at the time or point of importation, is nevertheless to be regarded as an internal tax or other internal charge, or a law, regulation or requirement of the kind referred to in paragraph 1, and is accordingly subject to the provisions of Article III.

GATT Article III:2

Subsequently, reaching GATT article III we find the rule that has the most intimate relationship with the measures at issue since it enshrines the National Treatment Principle. This is part of WTO's backbone along with the Most Favored Nation rule. On the one hand, the latter principle handles with benefits that have not been granted to other members, on the other hand, the former approaches how internal regulations may affect products from a member on their sale, transportation, among others⁶⁴. It fundamentally establishes the rule that products may not be discriminated due to its country of origin as well as aiming to avoid disguised protectionism of the national industry⁶⁵ as it seeks to "ensure equal competitive conditions between imported and like domestic products".⁶⁶ It reads as follows:

The products of the territory of any contracting party imported into the territory of any other contracting party shall not be subject, directly or indirectly, to internal taxes or other internal charges of any kind in excess of those applied, directly or indirectly, to like domestic products. Moreover, no contracting party shall otherwise apply internal taxes or other internal charges to imported or domestic products in a manner contrary to the principles set forth in paragraph 1.

Article III:2 first sentence

Article III:2, first sentence determines the process to find a breach of its provision, which is: "(i) the domestic and the foreign products are like, and (ii) the latter is taxed in excess of the former".⁶⁷

Addressing the likeness test, there are four layers that have to be completed for a product to be deemed to be "like" another: "(i) the physical properties of the products, (ii) the

64 *Supra* 21, article III:1.

65 Gerhart, Peter and Baron, Michael. "Understanding National Treatment: The Participatory Vision of the WTO." *Indiana International and Comparative Law Review* 14, no. 3, (2004). 505-506.

66 Appellate Body Report, *Canada – Periodicals*, p. 18.

67 Horn, Henrik and Mavroidis, Petros. "Still Hazy after All These Years: The Interpretation of National Treatment in the GATT/WTO Case-Law on Tax Discrimination." *European Journal of International Law* 15, no. 1, (2004). 41.

extent to which the products are capable of serving the same or similar end-uses; (iii) the extent to which consumers perceive and treat the products as an alternative means of performing particular functions in order to satisfy a particular want or demand; and (iv) the international classification of the products for tariff purposes".⁶⁸

Nonetheless, while tariff classification has been found to be a useful basis in order to determine if two products could be considered as like,⁶⁹ the DSB "noted that previous panel and working party reports had unanimously agreed that the term "like product" should be interpreted on a case-by-case basis".⁷⁰ Thereby clarifying that the specific characteristics of the dispute will condition the outcome of the test and which elements will best serve the study.

However, the DSB has understood likeness as an accordion which width "is determined by the particular provision in which the term "like" is encountered as well as by the context and the circumstances that prevail in any given case to which that provision may apply."⁷¹ Therefore, as Article III:2, first sentence is extremely narrow, it covers products that are perfectly substitutable,⁷² this is, almost identical.

Dealing with the second tier, if the products were deemed as like, the term "in excess of" enshrined in the present rule means that even the smallest difference of taxation is too much.⁷³

Article III:2 second sentence

Article III also holds another provision in its second sentence which is developed through the Ad Article III:2, that states:

A tax conforming to the requirements of the first sentence of paragraph 2 would be considered to be inconsistent with the provisions of the second sentence only in cases where competition was involved between, on the one hand, the taxed product and, on the other hand, a directly competitive or substitutable product which was not similarly taxed.

This rule establishes a three-tiered test: the products must be directly competitive or substitutable; not similarly taxed and be so to afford protection to the domestic industry.⁷⁴

68 Appellate Body Report, *EC – Asbestos*, para. 101.

69 Appellate Body Report, *Japan – Alcoholic Beverages*, pp. 22.

70 Ibid, p. 20; Panel Report, *Indonesia – Autos*, para. 14.109; Appellate Body Report, *Philippines – Distilled Spirits*, paras. 7.31-7.37 and 7.124-7.127.

71 Appellate Body Report, *Japan – Alcoholic Beverages*, p. 21.

72 Appellate Body Report, *Korea – Alcoholic Beverages*, para. 118.

73 Appellate Body Report, *Thailand – Cigarettes*, para. 112.

74 Daly, Michael. *Is the WTO a World Tax Organization? A primer on WTO rules for tax policymakers*. International Monetary Fund, 2016. Accessed January 18, 2019. <https://www.imf.org/external/pubs/ft/tnm/2016/tnm1602.pdf>. *Argentina - Measures Affecting the Export of Bovine Hides and the Import of Finished Leather* (2000), WT/DS155/R (Panel Report), pp. 24; *Chile - Taxes on Alcoholic Beverages* (1999), WT/DS87/AB/R (Appellate Body Report), para. 47; *Mexico - Tax Measures on Soft Drinks and Other Beverages* (2006), WT/DS309/R (Panel Report), para. 8.66.

Regarding the first element, an essential factor in determining that the products at issue are directly competitive or substitutable is if they fulfill the condition of giving alternative ways of satisfying consumers' needs or tastes.⁷⁵ Likewise, this Body has also emphasized the role of price differentials, as "*evidence of major price differentials could demonstrate that the imported and domestic products are in completely separate markets*".⁷⁶ Also, cross-price elasticity of demand has been taken by the Dispute Settlement Body (hereinafter "DSB") as paramount when pondering whether products are directly competitive or not.⁷⁷

Addressing the second element, to fulfill the requirement of "not similarly taxed", the difference in taxation between domestic products and imported goods has to be "much more",⁷⁸ surpassing a *de minimis* standard.

Lastly, even if pondered as "not similarly taxed", a measure would still have to be proven to afford protection to the national industry. This step under Article III:2, second sentence requires an "*analysis of the structure and application of the measure in question on domestic as compared to imported products*".⁷⁹

Article XX GATT 1994

Finally, GATT article XX contains general exceptions in case a measure do breach other provisions but it is justified under the catalog that this rule brings. It requires a two-tier test under which the measure must first demonstrate to be covered under one of the exceptions and then to show that it satisfies its introductory paragraph, scrutinizing whether the measure is discriminatory or not.⁸⁰

"Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures:

(...)

(b) *necessary to protect human, animal or plant life or health,*

(...)

(g) *relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption,"*

75 Appellate Body Report, *Korea – Alcoholic Beverages*, para. 115-116.

76 Appellate Body Report, *Philippines – Distilled Spirits*, para. 215.

77 Appellate Body Report, *Korea – Alcoholic Beverages*, para. 134.

78 Appellate Body Report, *Japan – Alcoholic Beverages*, para. 5.11. Appellate Body Report, *Canada - Periodicals*, pp. 30.

79 Panel Report, *Mexico – Soft Drinks*, para. 8.66.

80 Unger, Mark. "Capítulo 7: GATT." In *Derecho de la Organización Mundial del Comercio (OMC)*, edited by Mark Unger and Mario Matus, 189-255. Bogotá: Universidad Externado de Colombia, 2016. 243.

Preliminarily, the process of analysis under this provision needs to establish two issues: whether the measure falls within one of the listed exceptions of this norm and whether this measure satisfies the requirements of its *chapeau*.⁸¹

The legitimate objective

Notwithstanding the fact that literals (b) and (g) pursue similar ends, their analysis is different due to its wording. Thus, XX (b) requires that the measure falls within the range of policies designed to achieve the legitimate objective and to be necessary to achieve such objective,⁸² whereas XX (g) commands it to "relate to" the conservation of the mentioned resources and made in conjunction with restrictions upon the domestic industry.

The necessity of the measure

Moreover, regarding the necessity of a measure for it to be justified under Article XX (b) demands "an assessment of the 'relative importance' of the interests or values furthered by the challenged measure".⁸³ Thereupon, its analysis contemplates three aspects in a weighing and balancing process:

"a) The extent to which the measure contributes to the realization of the end pursued. The higher the contribution, the more easily a measure might be considered as necessary.

b) The importance of the interests or values protected.

*c) The degree to which the measure produces trade restrictions. A measure with a relatively slight impact upon imported products might more easily be considered as necessary, than a measure with intense or broader restrictive effects."*⁸⁴

Besides, a measure that has gone through this test will be considered to be necessary "only if there were no alternative measure consistent with the General Agreement, or less inconsistent with it".⁸⁵ But not an alternative, the DSB has clarified that it should be reasonably expected from the member to have had enacted it, while achieving the desired level of protection.⁸⁶

On the other hand, Article XX (g) compels members to demonstrate that the adopted measure has "a close and genuine relationship of ends and means' to the conservation of exhaustible natural resources, when such trade measures are brought into operation, adopted, or applied and 'work

81 *Supra* 56, 601.

82 Panel Report, *EC – Tariff Preferences*, paras. 7.198–7.199.

83 Appellate Body Report, *Colombia – Textiles*, para. 5.71.

84 Salinas, Isabel. "The concept of Necessity under the GATT and National Regulatory Autonomy." *Via Inveniendi et Iudicandi* 10, no. 2, (2015). 86.

85 Appellate Body Report, *EC – Asbestos*, para. 171.

86 Appellate Body Report, *Brazil - Retreaded Tyres*, para. 170.

together with restrictions on domestic production or consumption, which operate so as to conserve an exhaustible natural resource".⁸⁷

The "relating to" standard

Likewise, in order to comply with the "relating to" requirement, the measure must be shown to be "primarily aimed at the conservation of natural resources"⁸⁸ and not be incidentally aimed at that goal.⁸⁹

Furthermore, the second step under its analysis demands that the measure sets restrictions or charges to local goods as well as it does for foreign,⁹⁰ this is, to be applied even-handedly.

The chapeau

However, a measure under this test would still need to comply with the requirements of its introductory clause. This provision highlights the sovereignty of its members by acknowledging their right to impose certain regulations or laws that may affect trade notwithstanding their obligations under the General Agreement.⁹¹ Also, the main focus of this rule is not the measure as such but the measure as applied and how to balance the right to invoke Article XX and the duty to comply with the commitments made with the other members,⁹² thereby impeding the nullifying or impairment of their rights, strongly linked with the principle of the good faith.⁹³

Subsequently, in order to comply with the *chapeau* the measure must not be used, on the one hand, as a means for arbitrary or unjustifiable discrimination between countries where the same conditions prevail or, on the other hand, a disguised restriction to international trade.⁹⁴

Firstly, it is necessary to establish that the term "discrimination" in this provision has a different connotation from the one in the rest of provisions in the GATT in behalf of the fact that "*the nature and quality of this discrimination is different from the discrimination in the treatment of products which was already found to be inconsistent with one of the substantive obligations of the GATT 1994*",⁹⁵ therefore, the mere finding that a measure is discriminatory on the grounds of other rules does not make it fail this test.

87 Appellate Body Report, *China — Rare Earths*, para. 5.94.

88 Appellate Body Report, *US — Gasoline*, pp. 18.

89 Appellate Body Report, *China — Rare Earths*, para. 5.90.

90 *Ibid*, para. 5.132.

91 Gaines, Sanford. "The WTO's Reading of the GATT article XX Chapeau: A Disguised Restriction on Environmental Measures." *University of Pennsylvania Journal of International Law* 22, no. 4, (2001). 839.

92 Appellate Body Report, *US — Shrimp*, para. 156.

93 *Ibid*, para. 158-159.

94 Appellate Body Report, *US — Gasoline*, pp. 23.

95 Appellate Body Report, *EC — Seals*, para. 5.298; Appellate Body Report, *Brazil — Retreaded Tyres*, para. 246.

Henceforth, its scrutiny ought to be focused on the rationale behind the enactment of the measure, its foundations, as well as the objective pursued by it on a case-by-case basis.⁹⁶ Satisfying this condition requires that the measure is applied with a substantial link with the accomplishment of the objective that falls within the scope of the exceptions under Article XX.⁹⁷

Finally, referring to the last item under this analysis, the one that states that the treatment must be done "between countries where the same conditions prevail", it must be clarified that this entirely depends on the parties that clash on a dispute. Given that this "conditions" make reference to the ones that are "relevant for the purpose of establishing arbitrary or unjustifiable discrimination"⁹⁸, elements that will only appear at the moment of an actual controversy.

Regarding the standard of a disguised restriction on international trade, the DSB has stated that due to the wording of the *chapeau*, it should be read along with the meaning of "arbitrary or unjustifiable discrimination", hence embracing their meaning inside its study,⁹⁹ matter that, if addressed as it was above, will satisfy the requirements under this rule. Also, another factor in order to determine whether a measure is a hidden restriction has to do with its design and architecture.¹⁰⁰

The relevance of case-law

At this point, it is mandatory to establish why WTO-jurisprudence is taken in consideration as an authority even though that under the stated organization the source of international law that bounds members are treaties. That is so owing to the fact that the Dispute Settlement Understanding (hereinafter "DSU") states that: "The rules and procedures of this Understanding shall apply to disputes brought pursuant to the consultation and dispute settlement provisions of the agreements listed in Appendix 1 to this Understanding (referred to in this Understanding as the "covered agreements")".¹⁰¹

Accordingly, the source of law that the Panels and the Appellate Body are compelled to apply are the "covered agreements" that this article states.¹⁰² Still, in particular instances, the DSB has pronounced itself apropos this topic, stating that despite the fact that it is not compulsory to follow the reasoning of past rulings, if the former interpretation is persuasive enough relating to the understanding of a WTO-rule, it is very likely that it will be respected in order to enhance the security and the predictability

96 Appellate Body Report, *Brazil – Retreaded Tyres*, para. 229-230.

97 Appellate Body Report, *US – Tuna II (Mexico)*, para. 7.316.

98 Appellate Body Report, *EC – Seals*, para. 5.299.

99 Appellate Body Report, *US – Gasoline*, p. 24.

100 Appellate Body Report, *EC – Asbestos*, para. 8.236

101 *Understanding on Rules and Procedures Governing the Settlement of Disputes*, 1869 U.N.T.S 401, I.L.M 1226, (1994), article 1.1.

102 The Appendix 1 states that the covered agreements are: the Agreement Establishing the World Trade Organization, the Multilateral Agreements on Trade in Goods, the General Agreement on Tariffs and Trade, the Agreement on Trade-Related Aspects of Intellectual Property Rights, among others.

of the international trading system,¹⁰³ as stated in article 3.2 of the DSU. Also, previous judgments create legitimate expectations among WTO members and thus should be considered when relevant to any dispute.¹⁰⁴

2. APPLICATION OF THE LEGAL STANDARD

A. Whether current CNCT is consistent with the quoted WTO rules

i. GATT Article II

To analyze the measure at issue, we must first clarify which are the obligations that Colombia bears regarding the cited fossil fuels. Its tariff commitments rest on its Schedule of Concessions, which establishes that petroleum products have a bound rate of 35%.¹⁰⁵

Nonetheless, CNCT does not have any relation with GATT article II whatsoever. That is so owing to the fact that, as noted, the types of measures that fall under article II are ordinary customs duties and other duties or charges, since they are deeply linked to importation and in terms of the DSB, their main characteristic is to accrue at the moment of the importation and by virtue of the importation, more specifically.

On the one hand, it is true that article 221 of Law 1819 of 2016 states that the taxable event of this charge is importation for self-consumption as well as importation for its sale. However, even though CNCT levies the importation, this condition alone does not make it an import duty. On the other hand, Article II:2 (a) declares that nothing shall prevent members from imposing charges equivalent to internal taxes at any time on the importation, if applied to the domestic like product in a manner consistent with Article III:2.

From the measure's text it is feasible to conclude that the charge that is applied on imported fossil fuels is the same as the one that is applied to domestic fossil fuels at the time of their sale, thus fitting inside article II:2 (a)'s the scope.

Additionally, CNCT's charge on imported products acts out as a Border Tax Adjustment (hereinafter "BTA"). BTAs are nothing but the application of an internal tax at the point of customs¹⁰⁶, a matter that has been assessed for a long time, since the GATT 1947. The 1970 Working Party on Border Tax Adjustments analyzed whether this kind of measures could be found to breach their GATT obligations, introducing discrimination and ultimately contravening the National Treatment Principle. It was stated that the types of taxes that were eligible to be adjusted at the border are indirect taxes, namely,

103 Appellate Body Report, *US – Shrimp*, para. 109.

104 Appellate Body Report, *Japan – Alcoholic Beverages II*, pp. 107-108.

105 World Trade Organization. "Colombia," Accessed January 20, 2019. https://www.wto.org/english/res_e/statis_e/daily_update_e/tariff_profiles/CO_E.pdf

106 Unger, Mark. "Capítulo 7: GATT." In *Derecho de la Organización Mundial del Comercio (OMC)*. 210.

the ones that levy the product and not the producer and the Working Party even took sales taxes as examples of acceptable adjustments.¹⁰⁷

Bearing this in mind, Colombia has not breached any obligation concerning import duties, as CNCT is collected at the point of customs the same way as its sales tax is, according to the Statute:

ARTICLE 420.¹⁰⁸ TAXABLE EVENTS OF THE TAX.

The sales tax shall be applied to:

(...)

d) The importation of tangible property that has not been expressly excluded

Furthermore, one of the reasonings behind the existence of these types of measures is "preventing double taxation or loopholes in taxation, and thus to preserve the competitive equality between domestic and imported products",¹⁰⁹ purposes that are also pursued by the National Treatment Principle, granting equal competitive field for imported products.

ii. GATT Article III

Thus, taking this rationale in consideration when examining CNCT in light of GATT Article III:2 along with the fact that it levies products for their intrinsic characteristics, without addressing any circumstance other than its quality of fossil fuel, it is possible to conclude that it does not breach the quoted provision either.

Article III:2 first sentence

This claim gains strength when analyzing the steps that have to be fulfilled to find if a measure is consistent with Article III:2, first sentence, more specifically, the likeness test.

Firstly, the product's nature and quality: as the measure does not distinguish any fossil fuel out of their special physical features, then every sort of fuel that fits within the characteristic of being either natural gas, gasoline, kerosene, jet fuel, etc., is subject of the measure, meaning that products nature and quality is not a feature that determines whether the charge is levied or not.

Secondly, end-uses: it is clear that both, imported and domestic fossil fuels, serve the same end-uses, such as providing gasoline for people that need it for their personal transportation, for industries that depend on them for their enterprises, etc.

¹⁰⁷ *Supra* 51.

¹⁰⁸ Artículo 420. Hechos sobre los que recae el impuesto.

"El impuesto a las ventas se aplicará sobre:

(...)

"d) La importación de bienes corporales que no hayan sido excluidos expresamente".

¹⁰⁹ World Trade Organization, *Taxes and Charges for Environmental Purposes: Border Tax Adjustment*, Geneva: WTO Secretariat, WT/CTE/W/47, para. 24.

Thirdly, consumers' tastes and habits: consumers do not have the possibility of distinguishing imported or national fuels and they do not have a special preference for one or other, since the measure levies, for instance, national kerosene without making any differentiation with foreign kerosene.

Finally, in respect of tariff classification, all these fuels can be found inside chapter 27 of the Harmonized System Codification, which comprises mineral fuels; mineral oils and products of their distillation; bituminous substances and mineral waxes. This evidences how all fuels can be considered as like given the fact that they are not perceived differently whatsoever.

Hence, when comparing the measure as applied to domestic and foreign products it is logical to establish that while they are like products and thereby within the scope of Article III:2, CNCT does not tax imported products "in excess of" domestic ones, since the tax base is equal for every product and if they share the same characteristics, the consequent charge will be the same, meaning that this measure is consistent with Article III:2.

Article III:2 second sentence

Also, as it was ascertained that the products subject of this analysis are like, there is no need for scrutinizing CNCT under the broader category of this provision's second sentence, that deals with directly competitive or substitutable products, as it has been ascertained that these products fit within a narrower category and still comply with Article III:2, first sentence.

Therefore, the necessary outcome of analysis under the quoted rule would be the same to the one that has already been established, letting us conclude that, at its current state, CNCT is consistent with WTO law and that a dispute concerning it would be highly unlikely.

B. Whether our proposal could be consistent with the aforementioned legal standard

The consecutive analysis will represent a bigger complication than the one that the current measure has signified due to the fact that expanding the reach of CNCT will bother categories of products of major sensibility inside international trade as well as for the consumers, as stated in the past section.

Thus, the rules that enshrine CNCT should be reformed through a new law that aggregates the new taxable events and features that the measure will possess. Our proposal has its foundations in the principle that it continues to levy both imported and domestic products equally, with the only difference that the tax rate and base are determined from the quantity of GHGs that it generates during its production process.

i. GATT Article II

Addressing our proposal in the light of this rule, it can be served with the same conclusion of CNCT, as stated in prior section 2.A.i this is, that it is not an import duty due to its nature. However, as this rule operates according to the products at issue, we must first recall Colombia's obligations lying on its Schedule of Concessions regarding the products that are being proposed to be subject of the tax. In respect of chemicals, their bound rate is 70%; minerals, paper, wood, and leather, 35%; textiles, clothing and "manufactures", 40%,¹¹⁰ which is not a complication as the measure would not be conceived as an import duty.

ii. GATT Article II:2 (a)

It is important to recall that a measure is covered by this rule when it: complies with article III:2 and levies a product or an article with was utilized in its production in whole or in part.

Therefore, our proposal would be imposed as an internal tax collected at the point of customs and therefore under the scope of Article III, as *Ad Article III* establishes that regardless of the moment when an internal tax that is applied to domestic goods is enforced, it will be subject to these provisions, as a BTA.

Furthermore, some WTO Members could argue that the suggested tax would not fall under the scope of Article II:2 (a) as it does not levy inputs that are physically present at the product,¹¹¹ meaning that perhaps the effort of taxing products based on the GHGs that is emitted in its production process may be for no avail.

Nevertheless, the jurisprudence of the WTO has provided that the main issue to determine in these disputes is whether the tax is applied to individual imported goods rather than the objective that the measure pursues.

Thus, a measure that levies imported and domestic products on the basis of the amount of GHGs generated in its manufacturing could be allowed to be adjusted at the border under Article II:2 (a) as they are consequence of an article from which the product was produced,¹¹² following the quoted interpretations made by the DSB.

iii. GATT Article III:2

As the measure is under the scope of article III:2, we must then proceed to apply its legal standard.

110 World Trade Organization. "Colombia," Accessed January 20, 2019. https://www.wto.org/english/res_e/statis_e/daily_update_e/tariff_profiles/CO_E.pdf

111 Low, Patrick; Marceau, Gabrielle & Reinaud Julia. "The interface between the trade and climate change regimes: Scoping the issues" *WTO Staff Working Paper*, (2011). 7-8.

112 Pauwelyn, Joost. "Carbon Leakage Measures and Border Tax Adjustments under WTO Law." In *Research Handbook on Environment, Health and the WTO*, edited by Geert Van Calster and Denise Prévost, 448-506. Northampton: Edward Elgar, 2012. 503.

Article III:2 first sentence

As referred to above, the likeness test, enshrined in its first sentence, deals with the products end-uses, consumers' tastes and habits and products nature and quality, which are elements that help the interpreter to ascertain the extent of the competitive relationship between the products at issue. In respect of tariff classification, it would not serve the analysis of likeness since the products under scrutiny fall within the same codes and the other elements may aid greatly to an inquiry on that characteristic.

It is not possible to foresee every dispute that our proposal could arise since the analysis under this rule will depend on the products to be compared. Nevertheless, it is possible to highlight specific characteristics that may assist Colombia in a hypothetical dispute as well as products that could be part of it, such as textiles and plastics.

Furthermore, regarding the end-uses, it is very difficult to establish that consumers will employ a different usage of two products just because one has a certain amount or none of GHGs in its production process and thereby the products serve the same end-uses.

Moreover, consumers' tastes and habits is a more relevant matter in the present case. Even though the quality of likeness is to be construed by taking objective parameters in consideration it also has a subjective analysis, consumers' viewpoint, which varies from country to country,¹¹³ meaning that perhaps in some territories products could be deemed as like whereas in other, they would not. For instance, consumers from certain countries that have a special preference for handmade clothing or footwear would assist the consistency of this measure.

Subsequently, in order to determine if Colombian population has a specific behavior towards products that entail pollution in its production process in oppose to ones that do not, it is mandatory to provide data coming from studies addressing this particular issue inside the country.

For example, when scrutinizing consumers' tendencies concerning green products in general, it is possible to conclude that certain proportion of Colombia's population indeed has an affinity with green products since they are willing to pay a higher price for them¹¹⁴ and that they are worried about the environmental impact that their actions could cause, situation that surrounds their purchasing attitudes.¹¹⁵

On the other hand, subjects strongly driven by environmental concerns share these characteristics: access to bachelor level education at the very least,¹¹⁶ are located between

113 GATT, Working party, *para.* 18.

114 Escobar, Nelcy; Gil, Adriana & Restrepo, Aura. "Caracterización preliminar del consumidor verde antioqueño: El caso de los consumidores del Valle de Aburrá." *Revista EAN*, 78. 100.

115 Gómez, Juan. "Consumidor verde en Colombia." Master's thesis, Universidad Externado de Colombia, Bogotá, 2016.

116 Vargas, Nathalia & Valencia, María. "Caracterización del perfil de compra de productos verdes del género femenino en la ciudad de Bogotá." Master's thesis, Colegio de Estudios Superiores en Administración, Bogotá, 2015. 38.

middle and upper classes¹¹⁷ and live either in Bogotá or Medellín, two of Colombia's most important cities, where the quoted surveys took place.

Ergo, when contrasting these discoveries, it is impossible to overlook the social condition of Colombia, where levels of poverty rise to 27% of its population.¹¹⁸ In this regard, it is implausible that consumers that struggle with their basic needs have a positive reaction towards more expensive products,¹¹⁹ an inference that supports the claim that green or eco-friendly goods aim to different kinds of consumers and have a specific market.

Finally, when analyzing the element of products' physical characteristics, it highly depends on the products that are compared on any given controversy. For instance, handmade products could be entitled to be environmentally friendly as opposed to machine-made ones¹²⁰ (such as textiles) and in some cases they can also be regarded as physically different, with higher quality on the former goods.¹²¹ Also, bioplastics and traditional plastics could be deemed to be physically diverse, in nature, since they come from different raw materials and perhaps quality,¹²² thus representing products that help the environment (in certain variations)¹²³ and others that do not.

Thus, when recalling the goal of the likeness test, which is to ascertain the competitive relationship between two products inside a given market, it allows us to conclude that there might be a degree of competition between the products at comparison, since they share the same end-uses and there is controversy regarding the difference of their physical characteristics, varying with the specific goods in contention.

Likewise, it is critical to recall that the accordion of likeness in this provision is particularly narrow, meaning that the standard that has to be fulfilled is particularly high and when comparing this requirement with the evidence that perhaps green products belong to a different market since they target and are bought by specific types of con-

117 Arroyabe, Camilo & Arrubla, Juan. "Tendencias de producción y consumo ecológico." *Revista Espacios* 39, no. 7, (2017).

118 Alsema, Adriaan. "Poverty in Colombia decreases but continues to grow in Bogota." *Colombia Reports*. March 23, 2018. Accessed January 15, 2019. <https://colombiareports.com/poverty-in-colombia-decreases-but-continues-to-grow-in-bogota/>

119 Kathy. "Why are Eco-Friendly Products more Expensive?" *Clarify Green*. January 7, 2019. Accessed January 15, 2019. <http://clarifygreen.com/eco-friendly-products-cost-more/>

120 The Better India. "TBI Blogs: How Supporting India's Handcrafted Products Can Also Help Protect the Environment," Accessed March 20, 2019. <https://www.thebetterindia.com/90488/india-handcrafted-products-protect-environment/>

121 Aditi Khemka, "Discover the Differences between Handloom and Powerloom Sarees," Accessed March 20, 2019. <https://www.linkedin.com/pulse/discover-differences-between-handloom-powerloom-sarees-aditikhe-mka>

122 Van den Oever, Martien; Molenveld, Karin; van der Zee, Maarten; Bos, Harriette. *Bio-based and biodegradable plastics – Facts and Figures*. Wageningen: Wageningen Food & Biobased Research, 2017. Accessed March 25, 2019. https://www.wur.nl/upload_mm/1/e/7/01452551-06c5-4dc3-b278-173da53356bb_170421%20Report%20Bio-based%20Plastic%20Facts.pdf. 63 – 65.

123 MINIPAKR. "Biodegradable vs. Bioplastics: What's the Difference?" Accessed March 26, 2019. <https://minipakr.com/en/2017/biodegradable-vs-bioplastics-whats-the-difference/>

sumers, it is possible to conclude that in certain situations the analysis cannot reach the likeness threshold under the present provision.

In the event that these products are considered like, the second tier under article III:2, first sentence should be almost automatic, since the expression "in excess of" of the present rule means that even the smallest difference of taxation is too much and hence would be found inconsistent under this rule.

Article III:2 second sentence

Nonetheless, in the case the products are found as not "like", our proposal could still be found to be inconsistent with article III:2, second sentence which regulates when products are directly competitive or substitutable. Therefore, the National Treatment obligation would be violated if the products under the scope of this provision are not similarly taxed and that they are on that situation to afford protection to domestic industry.

Even though consumers may utilize non-green products in exchange for green products to satisfy certain needs, it is likely that the special drive that consumers follow when purchasing them is not their use, rather, they may buy them to satisfy the need of supporting the environment,¹²⁴ based on global trends, as green marketing's intensification is present worldwide.

Nevertheless, these goods could be regarded as substitutable between each other, as Colombian consumers have stated that if eco-friendly products' prices fluctuated, they would consider buying conventional ones,¹²⁵ presumably evidencing a cross-price elasticity relationship, factor that has been utilized by the DSB to elucidate whether products are or not directly competitive or substitutable.

Green products are significantly more expensive than non-green,¹²⁶ and therefore they may belong to separate markets and as price differentials have also given context to the DSB to distinguish between directly competitive products, we are able to argue that they are not, according to the mentioned rationale. That is so owing to the fact that, same as the likeness test, this is a study that is done on a case-by-case basis, meaning that the value of the products could condition the conclusion of it, thereby allowing this deduction.

The second step of article III.2, second sentence test, after considering that the products at issue are under the scope of the provision and they are considered directly competitive, is that they are "not similarly taxed". *Ergo*, even though green goods are referred to as directly competitive to non-green products, they would have to be subject

124 Panjaitan, Togas and Sutapa Nyoman. "Analysis of Green Product Knowledge, Green Behavior and Green Consumers of Indonesian Students (Case Study for Universities in Surabaya)." <https://core.ac.uk/download/pdf/11851617.pdf>. 2269.

125 *Supra* 114.

126 "Green goods cost nearly 50% more." *The Telegraph*. March 30, 2010. <https://www.telegraph.co.uk/news/earth/earthnews/7785705/Green-goods-cost-nearly-50-more.html>

to an elevated tax differential that surpasses a *de minimis* standard, which could only be done taking the specific case at hand.

Lastly, we must examine whether the measure affords protection of domestic industry. This could be done by examining its design, structure and revealing. Our proposal would very unlikely be considered as treating more favorably domestic production and aiding its protection since it levies imported and local goods with the same standard, the quantity of GHGs emitted in its production process. Indeed, if an imported product has little or zero pollution in its production process, it would determine its tax rate, same with a highly contaminant local product, that will necessarily entail a greater charge.

Still, there may be a scenario in which our proposal could breach the provisions of Article III:2, second sentence, yielding the floor to the only possible path left, a debate on the justification of the measure under GATT Article XX.

iv. GATT Article XX

The literals that best fit our proposal and almost every measure relating to the conservation of the environment are (b) and (g), as stated above since these are the legitimate aims that are pursued by carbon taxes, to protect life and to ensure the conservation of exhaustible natural resources.

a). Could our proposal be justified under GATT Article XX (b)?

This exception has two main steps: to determine that the measure falls within the range of policies designed to achieve the legitimate objective and that it complies with the necessity test.

Addressing the first requirement, our proposal clearly aids the fulfilling of the objective sought by it, this is, to stop the effects of climate change. That is so owing to the fact that carbon taxes around the globe have demonstrated to reduce GHG emissions while not affecting or disturbing the economy.¹²⁷ Naturally, this is not the only path that Colombia has undertaken in order to comply with these goals, but as stated before, it has developed and put into function the Low Carbon Strategy as well as other rules that address the necessity to tackle climate change.

Further, the necessity test has three main steps: to analyze how much does the measure contribute to the realization of the legitimate objective, to ascertain the importance of the protected values and to study its trade restrictiveness.

127 Porter, Eduardo. "Does a Carbon Tax Work? Ask British Columbia." *New York Times*. March 1, 2016. Accessed January 20, 2019. <https://www.nytimes.com/2016/03/02/business/does-a-carbon-tax-work-ask-british-columbia.html>; Rosetti, Phillip; Bosch, Dan and Goldbeck, Dan. "Comparing Effectiveness of Climate Regulations and a Carbon Tax." *American Action Forum*. July 2, 2018. Accessed January 20, 2019. <https://www.americanactionforum.org/research/comparing-effectiveness-climate-regulations-carbon-tax-123/>

As stated above, a carbon tax supports the conservation of the environment as it helps to diminish the amount of GHGs into the atmosphere and, after the gathering of information on how it has actually achieved the stated goal, its level of contribution could be ascertained, once enacted.

Secondly, scientific studies have discovered that due to the rising temperatures caused by climate change, several animal species have been forced to migrate to colder areas, also, the ice caps have started to melt, generating the rising of the sea-level,¹²⁸ a matter that jeopardizes drinking water, with significant effects on deltas near coastal areas, since the rise of sea water makes freshwater saltier, impacting populations all over the world, as the exposure to salinity not only through drinking but also cooking or bathing can lead to hypertension or skin diseases.¹²⁹ Hence, bearing in mind that the quoted consequences are just a few among many and affect paramount interests for life on planet Earth, the protected values are of the highest category.

Thirdly, our proposal could not be regarded as a restriction to international trade whatsoever since it does not condition the entering of a product to Colombia or affects imported products with internal measures that are not imposed to domestic products. Thus, and as asserted before, the measure would apply uniformly to every product that falls within its scope, ensuring an equally competitive field.

Nevertheless, even if our proposal would pass the necessity test, it would still have to be established that there is not an alternative measure that could be reasonably expected from Colombia which contributed in the same manner as our proposal. Thereupon, what is pursued with this measure is to protect the environment while observing WTO's provisions but on the other hand it also sought for generating awareness on the people. From our view, a tax is the only measure that could somehow create consciousness due to its direct impact.

Likewise, for this measure to exploit its potential, it could be paired with other measures such as a labeling requirement for environmental products which might as well raise the ability of consumers to distinguish products that fall inside the tax from the ones that do not.

b) Could our proposal be justified under GATT Article XX (g)?

Furthermore, regarding this literal we must ascertain two main issues: that the measure has a close relationship with the conservation of natural exhaustible resources and that it is done with restrictions upon the domestic industry.

Therefore, when scrutinizing Colombia's environmental performance, it is possible to conclude that the main objective that our proposal, as well as the CNCT, pursues is to

128 Nunez, Christina. "Sea Level Rise, explained." *National Geographic*, February 19, 2019. Accessed February 20, 2019. <https://www.nationalgeographic.com/environment/global-warming/sea-level-rise/>

129 Vineis, Paolo; Chan, Queenie and Khan, Aneire. "Climate change impacts on water salinity and health." *Journal of Epidemiology and Global Health* 1, no 1, (2010). 8.

accomplish the environmental obligations that Colombia is bound to from the UNFCCC as well as the Paris Agreement. Bearing this in mind, this particular carbon tax displays a close relationship with the conservation of exhaustible natural resources.

Consequently, given the fact that, as it happens with the current tax, our proposal would charge imported and domestic product based on its GHG emissions deprived of any other factor, making it fulfill the requirements of Article XX (g).

c) Even under the scope of the mentioned literals, could our proposal reach the threshold of GATT Article XX's chapeau?

This provision demands a measure to demonstrate that it does not afford an arbitrary or unjustifiable discrimination between countries where the same conditions prevail and that it is not a disguised restriction to international trade neither.

Bearing this in mind and as it has been reiterated throughout this dissertation, the main target of our proposal (and every other carbon tax)¹³⁰ is to mitigate the effects of climate change. Nevertheless, reaching this point of the justification under Article XX, a carbon tax could be judged to discriminate foreign products, but yet demonstrate that this discrimination does not have the connotation of being "arbitrary" nor "unjustifiable."

In a hypothetical dispute, our proposal would need to demonstrate that the possible discrimination genuinely relates with the aim of protecting the environment from climate change, caused by the emission of GHGs, which is done by crafting the measure in a manner that does not affect trade more than necessary and that it holds a substantial bond with the end of protecting the environment.

Consequently, the discriminations that could probably arise in respect of the extended carbon tax would be introduced with the only aspiration of increasing the protection of the environment from other hazardous GHGs other than CO² alone, in the understanding that they could come from emissions of industries that produce goods that lead to such pollution, as stated above.

Accordingly, a similar conclusion could be reached by interpreting the words "arbitrary" and "unjustifiable", which are the particular features that discrimination must possess in order to fail the test under this provision.

The Vienna Convention on the Law of Treaties, which contemplates the rules for treaty interpretation in its article 31, is linked to the DSB through article 3.2 of the DSU. This rule states that the panels and the Appellate Body are bound to the covered agreements and that they will clarify its provisions according to the customary rules of interpretation of public international law. Hence, the ordinary meaning of the words, the context and the treaty's object and purpose have to be employed when interpreting WTO's provisions.¹³¹

130 Pearce, David. "The Role of Carbon Taxes in Adjusting to Global Warming." *The Economic Journal* 101, no. 407, (1991). 939.

131 Appellate Body Report, *US – Gasoline*, p. 17.

Thereupon, as "arbitrary" has been defined as: "existing or coming about seemingly at random or by chance or as a capricious and unreasonable act of will"¹³² and on the other hand "unjustifiable" is understood as: "not able to be shown to be right or reasonable",¹³³ a measure then must meet these characteristics to be deemed to breach the provisions of the *chapeau*, matter that has been further clarified by the DSB repeatedly.¹³⁴

In the present analysis, we are not able to find how our proposal may be considered to be conceived randomly or not to be reasonable whatsoever. As it was ascertained previously, climate change is an urgent matter and fighting it is a must do. Correspondingly, carbon taxes have shown to be a reasonable approach towards this problem and not to highly restrict trade.

Finally, the context and the purpose of the GATT and even further, of the WTO as a whole, which of course is also developed by the covered agreements. Inside the preamble of the Marrakesh Agreement "sustainable development" was introduced, which is a concept that filters to every other agreement inside this organization, in this particular case, the GATT. Again, carbon taxes are all about sustainable development, and hence our proposal is developing the ulterior purposes of the WTO.

Also, and as it has been clarified by the DSB, to determine if the dispute complies with the requirement of "countries where the same conditions prevail" we must analyze the reasons that the parties invoke to establish whether discrimination exists, a matter that will naturally be conditioned to the dispute itself.

Moreover, given that an analysis on whether a measure is a disguised restriction to international trade is done by auscultating its design, structure and revealing, which is an issue that would not give our proposal hard work since that would rely on the transparent design and publicity that the measure should have, clarifying how the tax should be applied and to which products, dismissing any claim of it being a hidden limit to international trade.

Thus, even if found to be inconsistent with the aforementioned provisions of the GATT, our proposal would likely fulfill the requirements of article XX, fitting within the quoted exceptions and matching its *chapeau*. Of course, this depends entirely on the specific case and our proposal could perhaps fail this test under certain circumstances.

132 *Merriam Webster Dictionary*, s.v. "arbitrary", accessed April 15, 2019, <https://www.merriam-webster.com/dictionary/arbitrary>

133 *Oxford Dictionary*, s.v. "unjustifiable", accessed April 15, 2019, <https://en.oxforddictionaries.com/definition/unjustifiable>

134 For instance, in certain cases such as the ones of US – Gasoline or US – Shrimp the fact that the United States did not engaged in serious negotiations with other members was deemed to be an "arbitrary" conduct in the terms of the rule under analysis. Also, in Brazil – Retreaded Tyres the Appellate Body stated that due to the special allowances that Brazil gave to MERCOSUR members, in respect of the measure at dispute, evidenced how it was not exteriorizing the proposed objective.

CONCLUSIONS

As has been demonstrated on previous pages, the clash between WTO law and environmental measures sets a large schism on which of them would prevail whilst having the relevant rules in mind and how they have been decoded inside the organization.

More specifically, carbon taxes have the spotlight inside this discussion as they are common channels through which States could address climate change and generate revenue that will later aid the battle against it. Nevertheless, the consistency of these charges inside the scrutinized system will not only depend on how the tax is crafted by the respective parliaments but on how consumers perceive such products, a question that may be modified by the country in which the inquiry is conducted.

For example, in Colombia, consumers that have a higher income than average can access to products that are eco-friendly or green, owing to the fact that the price of such goods is not an issue for them, whereas the average consumer may not be driven by ecologic thoughts as it would represent a much bigger sacrifice as opposed to the former kind of user. As stated above, this dichotomy let us logically conclude that green products (which would not be under the scope of our proposal) are not like nor directly competitive towards conventional ones as they are mainly aimed to other markets.

This cannot be regarded as a final statement to the problematic at issue because there could be a moment in which consumers would indistinctly buy both types of products; however, it is our view that it is not the current situation.

Thereupon, there could be countries where consumers do not make any judgment on green products and utilize them in their every-day life, a situation that would yield the floor to GATT General Exception's clause, an analysis that would require the scrutiny of the application of the measure rather than focusing on the measure itself. Hence, the test enshrined in article XX relies on the measure's crafting and how discriminatory it is, an issue that mutates from every carbon tax.

In conclusion, carbon taxes that apply to a great variety of products can be consistent with WTO's provision provided that the conditions of a given country such as Colombia make the products at issue unlike or indirectly competitive or substitutable, in terms of Article III:2, a provision that regulates taxes. However, if one can qualify the tax as inconsistent, the measure could be justified if it establishes that it does not afford an arbitrary or unjustifiable discrimination, matter that is done by engaging in negotiations with the potential economies that could be jeopardized and by demonstrating to be a thoughtful policy that seeks to protect the environment as well as showing that this is indeed its primary goal.

BIBLIOGRAPHY

"Así será la ley de Cambio Climático." *Revista Semana*, November 8, 2017. Accessed December 22, 2018. <https://www.semana.com/nacion/articulo/asi-sera-la-ley-de-cambio-climatico/536001>

- "Green goods cost nearly 50% more." *The Telegraph*. March 30, 2010. <https://www.telegraph.co.uk/news/earth/earthnews/7785705/Green-goods-cost-nearly-50-more.html>
- Aditi Khemka, "Discover the Differences between Handloom and Powerloom Sarees," Accessed March 20, 2019. <https://www.linkedin.com/pulse/discover-differences-between-handloom-powerloom-sarees-aditikhe-mka>
- Alsema, Adriaan. "Poverty in Colombia decreases but continues to grow in Bogota." *Colombia Reports*. March 23, 2018. Accessed January 15, 2019. <https://colombiareports.com/poverty-in-colombia-decreases-but-continues-to-grow-in-bogota/>
- Argentina — *Measures Affecting the Export of Bovine Hides and the Import of Finished Leather* (2000), WT/DS155/R (Panel Report).
- Arroyabe, Camilo and Arrubla, Juan. "Tendencias de producción y consumo ecológico." *Revista Espacios* 39, no. 7, (2017). 25-40.
- Asociacion Nacional de Empresarios de Colombia. "Colombia: Balance 2018 y Perspectivas 2019," Accessed December 28, 2018. <https://imgcdn.larepublica.co/cms/2018/12/28132344/ANDI-Balance-y-Perspectivas.pdf?w=auto>
- Bodansky, Daniel. "The history of the global climate change regime." In *International relations and global climate change*, edited by Urs Luterbacher and Detlef F. Sprinz, 23-41. London: The MIT Press, 2001.
- Boos, Daniela, et al. *How are INDCs and NAMAs linked?* Eschborn: Deutsche Gesellschaft für Internationale Zusammenarbeit, 2014. Accessed December 21, 2018. https://www.giz.de/en/downloads_els/indcnama.pdf
- Brazil — *Measures Affecting Imports of Retreaded Tyres* (2007), WT/DS332/AB/R (Appellate Body Report).
- Cambridge Dictionary, s.v. "tariff", accessed January 10, 2019, <https://dictionary.cambridge.org/es/diccionario/ingles/tariff>
- Canada - *Certain Measures Concerning Periodicals* (1997), WT/DS31/AB/R (Appellate Body Report).
- Carpenter, Chad; Chasek, Pamela; Wise, Steve and Cherian, Anilla. "A BRIEF HISTORY OF THE FRAMEWORK CONVENTION ON CLIMATE CHANGE." *Earth Negotiations Bulletin* 12, no. 12, (1995). 1.
- Chile — *Taxes on Alcoholic Beverages* (1999), WT/DS87/AB/R (Appellate Body Report).
- China — *Measures Affecting Imports of Automobile Parts* (2008), WT/DS342/R (Panel Report).
- China — *Measures Related to the Exportation of Rare Earths, Tungsten and Molybdenum* (2014), WT/DS431/AB/R (Appellate Body Report).
- Colombia — *Measures Relating to the Importation of Textiles, Apparel and Footwear* (2016), WT/DS461/AB/R (Appellate Body Report).
- Colombia's Political Constitution, Gaceta Constitucional No. 116 de 20 de julio de 1991.
- Correa, Pablo. "En 20 años Colombia aumentó en un 15% sus emisiones de Gases Efecto Invernadero." *El Espectador*. November 3, 2016. Accessed December 20, 2018. <https://www.elespectador.com/noticias/medio-ambiente/20-anos-colombia-aumento-un-15-sus-emisiones-de-gases-d-articulo-663749>.
- Crowley, Meredith. "An Introduction to the WTO and GATT." *Economic Perspectives* 27, no. 4, (2003). 42-57.

- Daly, Michael. *Is the WTO a World Tax Organization? A primer on WTO rules for tax policymakers*. International Monetary Fund, 2016. Accessed January 18, 2019. <https://www.imf.org/external/pubs/ft/tnm/2016/tnm1602.pdf>.
- Escobar, Nelcy; Gil, Adriana and Restrepo, Aura. "Caracterización preliminar del consumidor verde antioqueño: El caso de los consumidores del Valle de Aburrá." *Revista EAN*, 78. 92-107.
- European Communities – Conditions for the Granting of Tariff Preferences to Developing Countries* (2003), WT/DS246/R (Panel Report).
- European Communities – Measures Affecting Asbestos and Asbestos-Containing Products* (2001), WT/DS135/AB/R (Appellate Body Report).
- European Communities – Measures Prohibiting the Importation and Marketing of Seal Products* (2014), WT/DS400/AB/R / WT/DS401/AB/R (Appellate Body Report).
- Ferguson, Howard. "Second World Climate Conference, held in the International Conference Centre, Place de Varembé, Geneva, Switzerland, from 29 October to 7 November 1990." *Environmental Conservation* 18, no. 1, (1991).
- Fleming, James. *Historical perspectives on climate change*. New York and Oxford: Oxford University Press, 1998.
- Gaines, Sanford. "The WTO'S Reading of the GATT article XX Chapeau: A Disguised Restriction on Environmental Measures." *University of Pennsylvania Journal of International Law* 22, no. 4, (2001). 739-862.
- GATT Panel Report, *United States — Taxes on Petroleum and Certain Imported Substances*, adopted 17 June 1987, BISD 34S/136.
- GATT (1970) Report of the Working Party on Border Tax Adjustments, adopted on 2 December. (L/3464).
- GATT, *Industrial Pollution Control and International Trade*, Note by the Secretariat. June 9, 1971, L/3538.
- General Agreement on Tariffs and Trade*, 61 Stat. pt. 5 T.I.A.S 1700 55 U.N.T.S 194, (October 30th, 1947).
- General Assembly resolution, *Protection of global climate for future and present generations of mankind*, A/RES/45/212 (21 December 1990).
- Gentile, Dominic. "International Trade and the Environment: What is the Role of the WTO?" *Fordham Environmental Law Review* 19, no. 1 (2009). 195-230.
- Gerhart, Peter and Baron, Michael. "Understanding National Treatment: The Participatory Vision of the WTO." *Indiana International and Comparative Law Review* 14, no. 3, (2004). 505-552.
- Gómez, Juan. "Consumidor verde en Colombia." Master's thesis, Universidad Externado de Colombia, Bogota, 2016.
- Heal, Geoffrey. "CLIMATE CHANGE — "THE GREATEST EXTERNAL EFFECT IN HUMAN HISTORY". In *Endangered Economies: How the Neglect of Nature Threatens Our Prosperity*. New York: Columbia University Press, 2017.
- Horn, Henrik and Mavroidis, Petros. "Still Hazy after All These Years: The Interpretation of National Treatment in the GATT/WTO Case-Law on Tax Discrimination." *European Journal of International Law* 15, no. 1, (2004). 39-69.
- Housman, Robert and Zaelke, Durwood. "The Collision of the Environment and Trade: The GATT Tuna/Dolphin Decision." *The Environmental Law Reporter* 22, no. 4 (1992). 68-78.
- Indonesia — Certain Measures Affecting the Automobile Industry* (1998), WT/DS53/R (Panel Report).

- Marrakesh Agreement*, 1867 U.N.T.S 154, I.L.M 1144, (April 15th, 1994).
- Instituto Nacional de Hidrología, Meteorología y Estudios Ambientales. *Inventario Nacional y Departamental de Gases de Efecto Invernadero – Colombia*. Bogota D.C: Puntoaparte, 2016. <http://documentacion.ideam.gov.co/openbiblio/bvirtual/023634/INGEI.pdf>
- Japan – Taxes on Alcoholic Beverages* (1996), WT/DS8/AB/R WT/DS10/AB/R WT/DS11/AB/R (Appellate Body Report).
- Kathy. "Why are Eco-Friendly Products more Expensive?" *Clarify Green*. January 7, 2019. Accessed January 15, 2019. <http://clarifygreen.com/eco-friendly-products-cost-more/>
- Korea – Taxes on Alcoholic Beverages* (1999), WT/DS75/AB/R WT/DS84/AB/R (Appellate Body Report).
- Korff, S.A. "An Introduction to the History of International Law." *The American Journal of International Law* 18, no. 2 (1924). 246-259.
- Kortum, Sam and Weisbach, David. "Border Adjustments for Carbon Emissions: Basic Concepts and Design." *Resources for the Future*, (2016). 1-36.
- Levin, K *et al.* "Designing and Preparing Intended Nationally Determined Contributions (INDCs)." *World Resources Institute*. <https://www.wri.org/sites/default/files/designing-preparing-indcs-report.pdf>
- Levinson, Marc. "What Is Manufacturing? Why Does The Definition Matter?" *Congressional Research Service*, (2017). 1-14.
- Ley 13 de 1945, "Por la cual se aprueban unos instrumentos internacionales." Diario Oficial No. 25971 de 27 de octubre de 1945.
- Ley 170 de 1994, "Por medio de la cual se aprueba el Acuerdo que establece la "Organización Mundial del Comercio (OMC)", suscrito en Marrakech (Marruecos) el 15 de abril de 1994, sus acuerdos multilaterales anexos y el Acuerdo Plurilateral anexo sobre la Carne de Bovino." Diario Oficial No. 41.637 de 16 de diciembre de 1994.
- Ley 1819 de 2016, "Por medio de la cual se adopta una reforma tributaria estructural, se fortalecen los mecanismos para la lucha contra la evasión y la elusión fiscal, y se dictan otras disposiciones." Diario Oficial 50.101 de 29 dediciembre de 2016.
- Ley 1844 de 2017, "Por medio de la cual se aprueba el "Acuerdo de París", adoptado el 12 de diciembre de 2015, en París, Francia." Diario Oficial No. 50.294 de 14 de julio de 2017.
- Ley 1931 de 2018, "Por medio de la cual se establecen directrices para la gestión del cambio climático", 27 de julio de 2018.
- Low, Patrick; Marceau, Gabrielle & Reinaud Julia. "The interface between the trade and climate change regimes: Scoping the issues" *WTO Staff Working Paper*, (2011). 1-34.
- Matsuhita, Mitsuo. "Basic Principles of the WTO and the Role of Competition Policy." *Washington University Global Studies Law Review* 3, no. 2, (2004). 363-385.
- Melillo, J.M, *et al.* *Climate Change: The IPCC Scientific Assessment*. New York: Cambridge University Press, 1990. Accessed December 20, 2018. https://www.researchgate.net/profile/Michael_Ryan5/publication/235650900_Effects_on_Ecosystems/links/02e7e51996a7389a8b000000/Effects-on-Ecosystems.pdf
- Merriam Webster Dictionary*, s.v, "arbitrary", accessed April 15, 2019, <https://www.merriam-webster.com/dictionary/arbitrary>
- Mexico — Tax Measures on Soft Drinks and Other Beverages* (2006), WT/DS309/R (Panel Report).

- MINIPAKR. "Biodegradable vs. Bioplastics: What's the Difference?" Accessed March 26, 2019. <https://minipakr.com/en/2017/biodegradable-vs-bioplastics-whats-the-difference/>
- Ministerio de Ambiente y Desarrollo Sostenible. *Estrategia Colombiana de Desarrollo Bajo en Carbono*. http://www.minambiente.gov.co/images/cambioclimatico/pdf/Estrategia_Colombiana_de_De-sarrollo_Bajo_en_Carbono/FOLLETO_DE_PRESENTACION_ECDBC.pdf
- Ministerio del Medio Ambiente y Desarrollo Sostenible. *Listado de NAMAs en Curso*. http://www.minambiente.gov.co/images/cambioclimatico/pdf/Accion_nacional_Ambiental_/PORTAFOLIO_NAMAS_DCC_publicar_ultima_version.pdf
- Multilateral Trade Negotiations (The Uruguay Round), Trade Negotiations Committee, Meeting at Ministerial Level, Palais des Congrès, Marrakesh (Morocco). 12-15 April 1994, Annex II (Trade and Environment, Decision of April 14, 1994). MTN.TNC/45 (MIN).
- Nunez, Christina. "Sea Level Rise, explained." *National Geographic*, February 19, 2019. Accessed February 20, 2019. <https://www.nationalgeographic.com/environment/global-warming/sea-level-rise/>
- Ocko, Ilissa. "9 ways we know humans triggered climate change." Environmental Defense Fund, 2017. <https://www.edf.org/climate/9-ways-we-know-humans-triggered-climate-change>
- Oxford Dictionary, s.v. "unjustifiable"*, accessed April 15, 2019, <https://en.oxforddictionaries.com/definition/unjustifiable>
- Panjaitan, Togas and Sutapa Nyoman. "Analysis of Green Product Knowledge, Green Behavior and Green Consumers of Indonesian Students (Case Study for Universities in Surabaya)." <https://core.ac.uk/download/pdf/11851617.pdf>.
- Parikh, Jyoti and Baruah, Litul. "A New Framework for the UNFCCC: Common but Differentiated Responsibilities among Non-Annex I Countries." *Economic and Political Weekly* 47, no. 45 (2012). 67-72.
- Paris Agreement, U.N.T.S 54113*, (December 12th, 2015).
- Pauwelyn, Joost. "Carbon Leakage Measures and Border Tax Adjustments under WTO Law." In *Research Handbook on Environment, Health and the WTO*, edited by Geert Van Calster and Denise Prévost, 448-506. Northampton: Edward Elgar, 2012.
- Pearce, David. "The Role of Carbon Taxes in Adjusting to Global Warming." *The Economic Journal* 101, no. 407, (1991). 938-948.
- Philippines – Taxes on Distilled Spirits* (2011), WT/DS403/AB/R (Appellate Body Report).
- Pielke, Roger. "What Is Climate Change?" *Issues in Science and Technology* 15, no. 3 (2004). 515-520.
- Porter, Eduardo. "Does a Carbon Tax Work? Ask British Columbia." *New York Times*. March 1, 2016. Accessed January 20, 2019. <https://www.nytimes.com/2016/03/02/business/does-a-carbon-tax-work-ask-british-columbia.html>.
- Rich, David; Northrop, Eliza and Mogelgaard, Kathleen. "Colombia First South American Country to Release New Climate Plan Ahead of Paris." World Resources Institute. September 14, 2015. <https://www.wri.org/blog/2015/09/colombia-first-south-american-country-release-new-climate-plan-ahead-paris>
- Rosetti, Phillip; Bosch, Dan and Goldbeck, Dan. "Comparing Effectiveness of Climate Regulations and a Carbon Tax." *American Action Forum*. July 2, 2018. Accessed January 20, 2019.

- <https://www.americanactionforum.org/research/comparing-effectiveness-climate-regulations-carbon-tax-123/>
- Salinas, Isabel. "The concept of necessity under the GATT and national regulatory autonomy." *Via Inveniendi et Iudicandi* 10, no. 2, (2015). 77-99.
- Sawhney, Aparna. "Wto-Related Matters in Trade and Environment: Relationship Between WTO Rules And MEAs." *Indian Council for Research on International Economic Relations*, (2004).
- Schultz, Jennifer. "The GATT/WTO Committee on Trade and Environment – Toward Environmental Reform." *The American Journal of International Law* 89, no. 2 (1995). 423-439. 439.
- Sebenius, James. "Designing Negotiations Toward a New Regime: The Case of Global Warming." *International Security* 15, no. 4, (1991). 110-148.
- Sifonios, David. *Environmental Process and Production Methods (PPMs) in WTO law*. Laussane: Springer, 2018.
- Stavins, R and Ki-moon, Ban. "The United States and the Paris Agreement: A Pivotal Moment." *Harvard Project on Climate Agreements*, (2017).
- Tbailand — Customs and Fiscal Measures on Cigarettes from the Philippines* (2011), WT/DS371/AB/R (Appellate Body Report).
- The Better India. "TBI Blogs: How Supporting India's Handcrafted Products Can Also Help Protect the Environment," Accessed March 20, 2019. <https://www.thebetterindia.com/90488/india-handcrafted-products-protect-environment/>
- The Observatory of Economic Complexity, "Colombia," Accessed December 28, 2018. <https://atlas.media.mit.edu/en/profile/country/col/>
- Understanding on Rules and Procedures Governing the Settlement of Disputes*, 1869 U.N.T.S 401, I.L.M 1226, (1994).
- Unger, Mark. "Capítulo 7: GATT." In *Derecho de la Organización Mundial del Comercio (OMC)*, edited by Mark Unger and Mario Matus, 189-255. Bogota: Universidad Externado de Colombia, 2016. 189-255.
- Union of Concerned Scientists. "The IPCC: Who Are They and Why Do Their Climate Reports Matter?" Last revised date: October 11, 2018. <https://www.ucsusa.org/global-warming/science-and-impacts/science/ipcc-backgrounder.html#.W6wufC13GqA>
- United Nations Environmental Programme. "Background." <http://www.unepfi.org/about/background/>
United Nations Framework Convention on Climate Change, 1155 U.N.T.S 107, (May 9th, 1992). <https://unfccc.int/resource/docs/convkp/conveng.pdf>
- United Nations Organization, "Member States" Accessed December 23, 2018. <http://www.un.org/en/member-states/#gotoC>
- United States – Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products* (2015), WT/DS381/AB/R (Appellate Body Report).
- United States – Standards for Reformulated and Conventional Gasoline* (1996), WT/DS2/AB/R (Appellate Body Report).
- United States — Import Prohibition of Certain Shrimp and Shrimp Products* (1998) WT/DS58/AB/R, (Appellate Body Report).
- United States Environmental Protection Agency. "Overview of Green House Gases" Accessed January 10, 2019. <https://www.epa.gov/ghgemissions/overview-greenhouse-gases>

- Van den Bossche, Peter. *The law and policy of the World Trade Organization: text, cases and materials*. New York: Cambridge University Press, 2005.
- Van den Oever, Martien; Molenveld, Karin; van der Zee, Maarten; Bos, Harriëtte. *Bio-based and biodegradable plastics – Facts and Figures*. Wageningen: Wageningen Food & Biobased Research, 2017. Accessed March 25, 2019. https://www.wur.nl/upload_mm/1/e/7/01452551-06c5-4dc3-b278-173da53356bb_170421%20Report%20Bio-based%20Plastic%20Facts.pdf.
- Vargas, Nathalia and Valencia, María. "Caracterización del perfil de compra de productos verdes del género femenino en la ciudad de Bogotá." Master's thesis, Colegio de Estudios Superiores en Administración, Bogota, 2015.
- Vineis, Paolo; Chan, Queenie and Khan, Aneire. "Climate change impacts on water salinity and health." *Journal of Epidemiology and Global Health* 1, no 1, (2010). 5-10.
- Wiles, Richard. "It's 50 years since climate change was first seen. Now time is running out." *The Guardian*, March 15, 2018. Accessed December 20, 2018. <https://www.theguardian.com/commentisfree/2018/mar/15/50-years-climate-change-denial>
- World Trade Organization, "Colombia and the WTO," Accessed December 23, 2018. https://www.wto.org/english/thewto_e/countries_e/colombia_e.htm
- World Trade Organization, *Taxes and Charges for Environmental Purposes: Border Tax Adjustment*, Geneva: WTO Secretariat, WT/CTE/W/47.
- World Trade Organization. "Colombia," Accessed January 20, 2019. https://www.wto.org/english/res_e/statis_e/daily_update_e/tariff_profiles/CO_E.pdf